

**FY 2016 CHIEF OF NAVAL OPERATIONS (CNO) ENVIRONMENTAL AWARDS
COMPETITION ENVIRONMENTAL QUALITY – OVERSEAS INSTALLATION
AWARD ACHIEVEMENT PERIOD 01OCTOBER2014 – 30SEPTEMBER2016**

INTRODUCTION

Installation Mission

U.S. Naval Air Facility (NAF) Atsugi, Japan has a unique mission providing facilities, services and material that support over 2,500 personnel and over 100 aircraft of Carrier Air Wing FIVE (CVW-5), Helicopter Maritime Strike Squadron FIVE-ONE (HSM-51), and 36 tenant commands. The U.S. Navy operates NAF Atsugi jointly with the Japan Maritime Self Defense Force (JMSDF) and works daily to foster good relations and friendship with the host nation while serving to support the U.S. Navy's "Tip of the Sword," ensuring stability in the Western Pacific.

Population and Acreage

NAF Atsugi is host to nearly 6,000 military and civilian personnel and family members including 1,500 JMSDF and 1,000 Japanese civilians. The joint use arrangement with JMSDF provides unique international military cooperation and makes it an enjoyable place to work and live. NAF Atsugi resides on a total of 1,250 acres of land. NAF Atsugi also provides support for the Auxiliary Landing Field Kisarazu and Iwo To (former Iwo Jima).



Setting

NAF Atsugi is located in the most highly developed, urbanized, and industrialized portion of Japan, within 25 miles from the foot of world famous Mount Fuji in the heart of the Kanto Plain on the main island of Honshu, Japan. Tokyo, the largest city in the world, is located within 20 miles of NAF Atsugi. The neighboring cities in a 3-mile radius have a combined population of over 2 million people. U.S. Military installations Yokosuka, Yokota and Camp Zama are all within a 20-mile radius, allowing NAF Atsugi to work together with nearby installations to share available resources and experience. The Tade River, a major water source for agricultural irrigation, enters NAF Atsugi at the north end where the installation's two million gallon fuel farm is located and exits at the south end where the installation's more than one million gallon per day wastewater treatment plant is located.

BACKGROUND

Program Summary

At NAF Atsugi, the Naval Facilities Engineering Command Far East (NAVFACFE) Public Works Department (PWD) Atsugi Environmental Division (EV) oversees implementation of all requirements of the Japan Environmental Governing Standards (JEGS). The JEGS are a combination of U.S. and Japanese environmental laws, installation rights, Status of Forces Agreements and other international agreements that are frequently updated by U.S. Forces, Japan (USFJ) and the Government of Japan (GOJ). The EV team manages the following programs: air emissions; wastewater; petroleum, oil and lubricants; underground storage tanks; drinking water;

pesticides; natural and endangered species; environmental management system; radon; historic and cultural resources; asbestos; lead-based paint; hazardous waste; solid waste; PCBs; spill prevention and response planning; and hazardous waste removal and disposal.

Management Approach

The environmental programs at NAF Atsugi are proactively and comprehensively managed in accordance with written procedures and the Environmental Management System (EMS) program. Environmental program managers manage their programs using the Compliance Tracker tool to assess and document compliance status and to develop and track plans of actions and milestones for outstanding requirements. The Environmental Division Director reviews Compliance Tracker data with EV staff and reports real time compliance status to the senior installation management (monthly) and Regional Environmental Coordinator (quarterly). Mission risk and level of effort are the primary factors considered during senior leadership meetings to prioritize work. Weekly cross functional team (CFT) meetings with supported commands and other PWD staff are held to focus attention and resolve specific issues prioritized by senior leadership to be of significant importance. The environmental impacts of planned or future projects are anticipated using an environmental checklist and the innovative Preliminary Environmental Assessment Review (PEAR) tool.

Stakeholder outreach and partnership is a critical component of NAF Atsugi's EMS and is regularly conducted at all management levels with all tenant commands. On at least a quarterly basis the environmental director meets with senior leadership from tenant commands during the Executive Officer's (XO) department head's meeting to communicate roles, responsibilities and expectations of all tenants, request commitment of resources to maintain compliance, maintain open lines of communication with senior leaders to alert of training opportunities and resolve or focus on work practice issues when necessary. At the middle management level, weekly focused CFT meetings are held to focus on specific challenges associated with one program area. CFT meetings are focused, limited to one program area issue, and well attended due to results driven agendas. NAF Atsugi PWD also provides comprehensive environmental hazardous waste minimization, management and pollution prevention training to a wide range of squadrons and tenants at least quarterly.

In addition to military and civilian DOD installation personnel, other stakeholders including residents of military housing, are required to attend Area Orientation Brief training where they are introduced to the Commanding Officer's environmental policy and informed of ways to reduce waste and protect the drinking water system. For example, residents and employees are informed that they can pick up free household hazardous materials (such as cleaning supplies or motor oil) that were donated by personnel upon separation from NAF Atsugi. This greatly reduces disposal of hazardous materials.

Environmental Management System

NAF Atsugi's EMS is fully integrated into NAF Atsugi work practices and conforms to DOD and NAVFAC EMS policies and guidance. NAF Atsugi's EMS program has been a leader within NAVFAC Far East, as is evident through the many EMS products that are being adopted throughout the region. NAF Atsugi's significant aspects are waste, water, and energy. The installation consistently meets and exceeds all reduction goals.

Community Involvement

NAF Atsugi's many meaningful partnerships with the local off base community directly impacts the management of environmental aspects of the mission. In FY15 and FY16, NAF Atsugi began engaging the on-base Shirley Lanham Elementary School to provide energy and environmental awareness education to all students. Providing awareness education to students and their families will hopefully lead to a significant reduction in energy and water consumption with our on-base housing community. Involving the school also enhances annual environmental celebrations, such as Earth Day and the Energy Fair, with posters and projects. In FY16, local colleges began participating in on-base events, as Tokai University presented their award-winning solar-powered car.

EV Staffing/Gapped Positions Challenge

Gapped positions and high turnover are inherent challenges for overseas installations. To mitigate this, the EV team relies on well written, usable and current management plans. When fully staffed, the EV team consists of six USCS environmental professionals, six Japanese Master Labor Contract employees and one active duty Navy Seabee who collectively manage all of the aforementioned environmental programs and provide critical support to NAF Atsugi.

Despite the staffing challenges, and in part because of the staffing challenges, NAF Atsugi PWD has created and implemented outstanding environmental management innovations that have been shared with colleagues, the Regional Environmental Coordinator and HQ personnel for consideration for implementation Navy-wide.

OUTSTANDING ACCOMPLISHMENTS

First Overseas Installation to Implement Environmental Readiness Manuals

In 2015, NAF Atsugi deployed Environmental Readiness Manuals (ERMs) to thirteen tenant commands with high risk environmental aspects. ERM's follow the logic that environmental regulations target specific activities (e.g. storing POLs or transferring hazardous waste). By tailoring volumes of environmental code, plans and manuals to individual activities, each tenant command has a consolidated set of applicable environmental regulations. ERM's are a game changing tool that puts existing environmental regulations into a format that tenant commands can easily learn and follow

In addition to providing environmental requirements, the ERM's include checklists and inspection sheets that are customized to each tenant activities. These are reviewed monthly during routine audits by a designated Building Environmental Manager (BER). The BER communicates regularly with the EV team for guidance, support and to initiate work orders, as needed. Within three months of implementation, this program has identified and corrected twenty-two potential drinking water cross connections, which has increased protection of human health.

Each ERM is signed by the tenant command's Officer-in-Charge and the Installation's Commanding Officer. This provides a contract for each party to actively promote and engage in NAF Atsugi's environmental readiness. Once a tenant can display successful implementation of environmental requirements, the Installation Commanding Officer will paint a green "Environmental E" on the tenant's buildings. This will be similar to a "Battle E" signifying

combat readiness of a ship, which has motivated the tenant commands to compete against each other for the “Environmental E.”

Through the ERM’s, NAF Atsugi’s tenant commands have accepted the responsibility to actively manage and promote their environmental programs. ERMs also shift the installation’s view of the EV team as regulators (who frequently audit their spaces) to partners helping them to meet regulations- this is a huge step toward bringing NAF Atsugi to full environmental readiness.

Local Government and Community Coordination to Save Honey Bees

NAF Atsugi’s Natural Resource program manager received the NAVFAC Far East USCS Innovative Employee of the Quarter (2015) Award for innovative Natural Resources practices. He conserved valuable natural resources and strengthened NAF Atsugi’s relationship with local government officials and the local community when he established an innovative method of pest control at NAF Atsugi: relocating nuisance bee hives from on-base to a local farm at no cost to the government. Through this program, the EV team advances President Obama’s strategy to promote the health of honey bees (in accordance with the 20JUN2014 Presidential Memorandum) and supports an initiative by Japan’s First Lady to regrow the depleted Japanese honey bee population.



Per the aforementioned Presidential Memorandum - Creating a Federal Strategy to Promote the Health of Honey Bees and Other Pollinators, and the Department of the Defense (DoD) Memorandum of Understanding dated 23 October 2014 between DoD and the Pollinator Partnership, Navy installations are required to promote the conservation of pollinators such as honey bees. Honey bee populations have recently experienced significant reductions in population worldwide including Japan. The bee hive relocation effort eliminated the potential hazard without pesticides, conserved the honey bees, and demonstrated NAF Atsugi’s commitment to the local community. NAF Atsugi’s efforts and leadership resulted in the establishment of a unique relationship with local government officials and the community and preparation of a NAF Atsugi Standard Operating Procedure for bee hive management.

Since this program was established in 2015, NAF Atsugi has successfully relocated two hives, saving an estimated 100,000 honey bees. The program was recognized with both the 2015 CNO Environmental Award for Natural Resources and the 2016 USFJ Natural Resources Excellence Award. The EV team is sharing community contacts with nearby Camp Zama, Camp Fuji and Command Fleet Activities Yokosuka to expand the program.

Exemplary Partnership to Preserve Japan’s History

NAF Atsugi has an award winning Cultural Resources program. The primary objective of this program is to identify and manage the cultural resources in areas under the US Navy’s jurisdiction while also accomplishing NAF Atsugi’s mission of supporting the Air Wing. As part of Atsugi’s program, CR surveys are conducted by experts such as professional archaeologists.



Following the discovery of suspected historic remains along the Tade River, an archaeological excavation was conducted in 2015. NAF Atsugi's CRM partnered with the Government of Japan, including Kanagawa Prefecture and Ayase City representatives, to share information and preserve Japanese history. The US Navy's archaeologist and MWR also participated in this excavation, which uncovered numerous artifacts from a historically significant area. Participants assisted with funding,

labor and support to identify discovered artifacts.

The archaeological excavation exposed a multitude of items representing Kanagawa's history from the first human occupation. Discovered items include a lithic flake (pre-metallurgy cutting tool) from the Paleolithic Period (40,000-15,000 years ago), pottery from the Jomon Neolithic Period (15,000-3,000 years ago), engraved stone from the Chusei Judai Medieval Period (800-400 years ago) and coins from the Kinsei/Edo Period (400-150 years ago). This is a tangible part of history where you can touch and feel the past.

Written agreements between NAF Atsugi and the Kanagawa Board of Education require all discovered artifacts to be turned over to the Board of Education. Due to the great cultural significance of this excavation, NAF Atsugi's US and Japanese senior leadership reached an agreement with the Kanagawa Board of Education to display these artifacts in the US and JMSDF Command Headquarters building for six months each to remind and educate all new employees of Japan's heritage and history. Following the on-base display, all artifacts will be turned over to Kanagawa Prefecture for display in a local museum.

CONTINUING SUCCESS

Since 2013, NAF Atsugi has enjoyed unparalleled recognition for its development of highly effective management tools, such as the spotlight compliance tracker and the lifecycle Preliminary Environmental Assessment Review (PEAR) tool. These tools, which were fundamental to NAF Atsugi's 2014 CNO Environmental Award Recognition, continue to be modified and improved to meet mission requirements. These tools have become so effective that they are actively taught and distributed through the Civil Engineer Corps Officers School (CECOS) "Effective Environmental Management System" class (course number A-4A-0098). In 2016, Command Fleet Activities Sasebo received the US Forces Japan Environmental Conservation award for implementation of NAF Atsugi's spotlight compliance tracker.

Waste Reduction

NAF Atsugi implements processes through EMS that increase diversion of waste from landfills through innovative use of contracts and a neighboring installation's Qualified Recycling Program (QRP). A solid waste contract was negotiated by NAF Atsugi to provide cost incentives to the waste services contractor to segregate and recycle rather than dispose of waste. The cooperative region QRP leveraged regional contracts for pickups for mixed metals, used petroleum oil and lubricant (POL), wooden crates, and cardboard. Improvements in data

management along with these changes in waste diversion and recycling allowed NAF Atsugi to report one of the highest total diversion rates in the Navy. NAF Atsugi's current Construction and Demolition (C&D) diversion rate is 75% and the current combined solid waste and C&D diversion rate is 55%. This is quite an accomplishment because, unlike other installations, NAF Atsugi does not have a QRP or a waste segregation facility located on the installation. In 2016, the EV team hired a solid waste program manager after a two year gap to that position.

Drinking Water Meets EPA Standards as Fit for Human Consumption

NAF Atsugi saves \$4.2M per year by producing its own water that meets or exceeds the EPA drinking water standards. NAF Atsugi's potable water system is considered by the Region to be one of the most complex systems in Far East because it utilizes its own groundwater supply source, treatment plant, and distribution system. In 2016, NAF Atsugi achieved potable water intensity reduction of 46.24% from the 2007 baseline.

The EV team successfully executed the following challenging tasks to maintain compliance of NAF Atsugi's drinking water program and to ensure the system is fit for human consumption:

- Received a Conditional Certificate to Operate the drinking water system.
- Executed nearly \$1.5M of drinking water projects to ensure the NAF Atsugi drinking water system appropriately meets all requirements of the new CNIC Overseas Drinking Water Standards. Special studies include a Pipe Material Survey, a Ground Water Under the Direct Influence of Surface Water Study, an Integrated Drinking Water Management Plan a Cross Connection Survey and a Water Treatment Study.
- Collected and analyzed 840 water quality samples to ensure that all customers receive fit for human consumption drinking water.
- Developed a leak detection and repair program that uses acoustic technology to identify leak locations for a quick repair.
- During routine hydrant flushing operations, NAF Atsugi collects flushed water and delivers to industrial users. Each year, this program saves 1 million gallons of water.
- Developed standard operating procedures for responding to water quality emergencies. These procedures have been adopted by various installations within the Far East region due to simplicity and ease of implementation.
- Continue to address all environmental drinking water deficiencies and all other additional requirements needed to improve Navy overseas installation drinking water systems.

Natural Resources

NAF Atsugi's has an award winning natural resources management program. Below is a list of significant accomplishments.

- Integrated Natural Resources Management Plan (INRMP) is current, approved, and was updated in 2015 based on multiple surveys conducted in 2014.
- Cross functional teams (CFT) are utilized at NAF Atsugi and serve to improve the natural resources program. CFT members include the Natural Resource Program Manager, Pest Control Shop Supervisor, Production Officer, tenant command personnel, contract specialists, specification writers, Japanese government personnel, local farmers, and Facility Operations Specialists. Through partnering, NAF Atsugi ensures that the INRMP and IPMP are cross-referenced when a pest is an invasive species or if a prospective pest is a potential natural resource that needs to be protected. Additionally this team ensures

any pesticides used are appropriate for natural areas. Most importantly, the CFT also ensures the INRMP and IPMP both comply with applicable regulations and are effective in carrying out their purpose while complementing each other. The INRMP reflects this fact and this is mirrored in the IPMP.

- Planning documents and contracts were reviewed to include clauses to address invasive species. These include prohibition of certain invasive plant species as landscape plants as well as inspections of soil and sod to prevent the movement of invasive species. Further guidance and standardization from NAVFAC FE will improve these clauses.
- Soil erosion control is addressed comprehensively in every construction project through the award winning PEAR tool. Contractor training for storm water pollution prevention and erosion control is required along with requirements for storm water pollution prevention plans and on-site erosion control measures. This is not only important for erosion control, but also to protect the integrity of the Tade River.

Cultural Resources

NAF Atsugi's cultural resource management program is noteworthy. Below is a list of accomplishments.

- ICRMP is current, approved, and includes a comprehensive look at how cultural resources are identified and managed on U.S. controlled properties in foreign countries. The ICRMP includes an emic insider's view of identifying and determining what constitutes a cultural resource with significant coordination and input from the host nation's version of the State Historic Preservation Officer called Boards of Education. In 2015, the ICRMP was translated into Japanese to assist in an easier exchange of information with the Host Nation representatives. This is the first ICRMP in the Far East that has been entirely translated into the language of the Host Nation. This effort has been praised by the Board of Education in bridging communication between the US and Japan.
- The 2014 CNO Environmental Award winning PEAR process tied to EMS, and inclusion of a digging permit process, greatly improved the processing and comprehensiveness of the review of projects for impacts to cultural resources. During this achievement cycle, 670 submittals and 95 excavation permits received PEAR reviews by the EV team.
- Partnership with the Kanagawa Board of Education for adaptive reuse of NAF Atsugi's historic chapel. The chapel, which underwent renovation in 2016, repurposed historic floor beams while preserving the cultural significance of the 1930-era building.

Partnering to Improve Japanese Water Quality

NAF Atsugi's stormwater and treated wastewater effluent discharge into the Tade River, which supports irrigation downstream of the installation. NAF Atsugi has seen great success in decreasing peak runoff and increasing water quality of the Tade River through several projects and initiatives, including:

- Participation in a Government of Japan flood mitigation program through a land grant for detention ponds. The first of two detention ponds has been constructed and the second will be completed by 2020. Each pond will hold nearly 9 million gallons and are vital to reducing downstream flooding.
- Construction of a wastewater surge tank to normalize flow into on-base wastewater treatment plant, which minimizes the risk of raw sewage discharge into the Tade River during extreme weather.